

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

JAN 2 3 2018

REPLY TO THE ATTENTION OF:

LU-16J

Mr. Jason Smith Corporate Environmental Director Tecumseh Products Company 2700 West Wood Street Paris, Tennessee 38242

Re:

EPA Conditional Approval of Groundwater-Surface Water Interface Performance

Monitoring Plan

Tecumseh Products Company (TPC), 100 East Patterson, Tecumseh, Michigan 49286

EPA ID: MID 005 049 440 AOC RCRA-05-2010-0012

Dear Mr. Smith:

The U.S. Environmental Protection Agency has completed a review of the *Groundwater-Surface Water Interface Performance Monitoring Plan* (GSI Monitoring Plan), dated September 11, 2017, submitted for the former Tecumseh Products Company (TPC) site in Tecumseh, Michigan. Based on the EPA's review, and with input from the Michigan Department for Environmental Quality, the GSI Monitoring Plan is approved with the following conditions which require modification of the GSI Monitoring Plan by TPC:

- 1) The Mixing Zone monitoring program shall include an evaluation of the data collected along the flow path from the source area to the compliance monitoring points (pore water monitoring network), inclusive for all of the parameters given limits in the Mixing Zone implementation letter. TPC must install monitoring wells proposed in the March 6, 2017 Revised Corrective Measures Proposal (CMP) and the September 11, 2017, GSI Monitoring Plan, along with those locations EPA requested including MW-44D, MW-48D, MW-49D, MW-51 (with both shallow and deep intervals), MW-52 (both shallow and deep intervals), MW-61D, MW-62 (both shallow and deep intervals closer to source), MW-XX (shallow, intermediate, and deep intervals at SB-80), MW-YY (deep interval, source areas south of MW-33S, installed east of source), and MW-ZZI (intermediate depth along Maumee, between Cummins and Patterson, and include existing wells PRB-01S, PRB-15D, PRB-16S, MW-17S, MW-21, and MW-41 in the proposed monitoring. Wells related to the GSI Monitoring Plan must be installed as soon as practicable (i.e., during the current quarter) and monitoring is expected to begin thereafter and including the additional assumptions below:
- 2) The Frequency and Duration of monitoring outlined in Sections 2.3, 3.3, and 4.3, must be revised to quarterly for the first two years of monitoring to establish a baseline in all of the new wells/seeps/pore-water locations, after which, TCP can request to reduce frequency from EPA if the data is consistent and shows no seasonality.

- 3) EPA notes apparent increases in groundwater concentrations at MW-45s at the end of 2017, following the tetrachloroethene (PCE) source removal, based on information in the January 2018 Quarterly Report. The monitoring program to continue until all stresses to the groundwater flow system have ceased or the source area and downgradient data are near the lowest monitoring zone criteria (chronic, within an order of magnitude, trending down), after which TCP can request to cease GSI compliance monitoring.
- 4) Under RCRA and MDEQ's Part 111, self-implementing work that would be appropriate for a Part 201 site is not appropriate.
- 5) The long-term documentation of natural attenuation requires monitoring for the following geochemical parameters on an annual or biannual basis from within the plumes once treatment begins: Dissolved Oxygen, Nitrate, Fe(II), Fe(III), Sulfate, Methane, Alkalinity, Oxidation-Reduction Potential, pH, Chloride, Ethene.
- 6) TPC must revise the second sentence of the second full paragraph of Section 1.2 to state (edits in italics): "This GSI Monitoring Plan serves as a revision to the proposed monitoring program described in Section 13.2.4 of the February 2017 Corrective Measures Proposal (CMP) and summarized in Table 1 and Figure 8, with modifications to monitoring locations/depths requested by EPA as summarized in its December 18, 2017, Conditional Approval of the Revised Corrective Measures Proposal letter."
- 7) Table 7 of the February 2017 CMP must be revised to reflect information in the three tables from the Mixing Zone Implementation letter by MDEQ, and utilizing Table 1 that was revised by Michigan Department of Environmental Quality in their September 5, 2017 email to EPA and TRC Environmental Corporation.

EPA will prepare a statement of basis that selects a remedy for TPC that meets program goals, as allowed under AOC RCRA-05-2010-0012. Please contact me if you have questions or comments and thank you in advance.

Sincerely,

Joseph Kelly, Project Manager Remediation and Reuse Branch

cc: Dale Bridgford and Joseph Victory, MDEQ
Graham Crockford, Stacy Metz, TRC Environmental Corporation
Douglas McClure, Conlin, McKenney & Philbrick, PC
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